

ancient city of Phenicia, situated on the Mediterranean to the north of Tyre. The name often occurs in the hieroglyphic legends of the conquests of the successors of Thoth-mosis, where the people are said to consist of two divisions. The lower or northern division was called by the Hebrews the *Arvadim* (Arvadim, as the Phenicians would have written it); the upper or southern division was afterwards called, *Rephaim*. A great many other names—indeed, we may note those of all the principal foreign nations inscribed on these monuments—are now satisfactorily ascertained: an immense advance in this made in the cultivation of this difficult branch of literature, and one that will elucidate many most interesting points in the earliest histories of mankind.

BRUMMAGEM ARCHITECTURE.

Sir,—A contemporary journal has lately edified its readers by some curious criticism, in which he has converted what are wholesome principles in themselves, into absurdities by pushing them into extravagance and ridiculous excess. Every one readily admits that the merit of buildings is greatly enhanced by their being constructed with genuine and permanent materials. The satisfaction which visible beauties, those of design and form, afford the eye, is no doubt considerably increased when we feel assured that, owing to the durability of the materials employed, the work is calculated to last for an indefinite period, perhaps for ages. But it is surely going to a most ridiculous extreme to stigmatise the use of fictitious materials, and cheaper *succedanea* for the more expensive kinds, as paltry Brummagem; and further, to decry in the most scolding manner, buildings of considerable merit for their design, merely because all their materials are not exactly genuine, or of so costly a kind as they might have been; for which offence their employers and not architects are answerable, since the latter would as willingly make use of Portland stone or even Carrara marble, as of Roman cement.

People want to have things appear costly, but to come cheap; and in order to gratify their unreasonable humours, several ingenious persons have set their wits to work, and invented a variety of artificial substances and compounds, and some as substitutes for the natural materials; and some of them imitate them so perfectly, as to be equally beautiful in appearance. But now starts up a most formidable critic, who pronounces his solemn ban upon every thing of the kind as arrant sham, deception, and Brummagem; sparing not even scagliola columns. Were his own sweeping denunciation as powerful as his will, it would infallibly prove a death-blow to a hundred inventions, patents, and manufactures. Adieu to Brown's scagliola and Keene's cement; to Bielefeld's papier-mâché for architectural decorations; to Cartoupière; to the crockeryware for pavements, imposed upon us under the name of encaustic tiles; to veneering with costly woods for the "shamming" outside of pieces of furniture; to paper-hangings in imitation of silk or velvet; to stamped leather; to bronzing—and why not also to gilding itself—to such "clumsy deception" and arrant make believe as that of coating wood-picture frames with gold-leaf, as a substitute for frames of the solid.

How it may strike you, Mr. Editor, I pretend not to say; but it does strike me that your "contemporary" has mounted upon a steed akin to that of Johnny Gilpin, and that he has carried him a very much greater length than he intended to go. Surely it was going quite far enough to go to the extent of abusing the "Companion to the Almanac,"—a publication now spoken of at least civilly by the "civil" and representing the architectural information and remarks in it to be downright nonsense, without so much spitting. According to him, "Freeman's place," does not at all deserve the character given of it in the "Companion," as being a fine piece of street architecture, "exceedingly well-proportioned as to the quantity as compared with the entire surface." And why? because, forsooth, the ground-floor, which is treated as an arcade, and where consequently the openings are considerably wider than the piers, does not answer to the remarks

upon the 'fenestration' generally. The critic, however, has chosen to shut his eyes entirely to all the rest, and fix upon the ground-floor alone, and in order to make it appear that it is that part which is especially noticed in the "Companion," he has turned the words "this arcade is exceedingly well proportioned, &c." into "this arcade is exceedingly, &c." Still he does "not intend the slightest censure" no the design itself. Verily the architects must be vastly obliged to him for such a sop à la Mrs. Candour; and he does not intend the slightest censure, he only plainly denies the chief merit claimed for their building, assuring them that it is not the fine unbroken mass which the "Companion" fancies it to be. Pity that he did not turn round to the Royal Exchange, for he might then have fallen foul on that as being very much like a "conservatory," since in that structure also, the ground-floor consists chiefly of large glazed openings between comparatively narrow piers.

Of the writer's civility, both Barry and Hardwick come in for a share; the former is told that his fountains in Trafalgar-square are "intensely ugly!" the other that the ceilings of the drawing and council rooms in the new building of Lincoln's-inn, are but "Brummagem," and that such is the opinion of the benchers themselves. "The criticism," observes the critic, "to be sure, is not that of professed (qu. professional?) architects, but it is at least that of gentlemen, and men of educated taste." It is rather likely to strike most persons as being but very Brummagem sort of criticism, since it is to be presumed that men of educated taste, are able to discuss matters of taste with something more like reasons and arguments, than vilifying epithets and contemptuous expressions amount to.

BUDOWNING.

THE MOSQUES OF KERBELA.

THE entrance to Kerbela a "sacred" city held by the Schyites has been immemorially interdicted, not only to Christians, but to all but a certain people. Monsieur Lottin de Laval, a French archaeologist having recently explored it, has addressed a communication upon it to M. Champollion, which appears in the *Courier d'Orient*. We avail ourselves of a quotation in the *Athenæum* for the following description of some of the buildings there. "I had been told that the two mosques of Kerbela were of unrivalled beauty—and I found it true: they exceed their fame. That of the Imam Hussein is the most sumptuous. A vast pile of masonry supports the cupola; and this cupola is entirely built in bricks of copper, about eighteen centimètres square, covered over with plates of gold of extreme purity. Three minarets spring up by the side of this sumptuous cupola, adorned with painted porcelain, enriched with flowers and inscriptions as far up as the Muezzin's gallery. Above this gallery are open colonnades on the two minarets which flank the southern gate; and these colonnades and the final shafts are gilt likewise. The interior is in harmony with this unheard of splendour. The side walls are of enamelled porcelain, having a dazzling effect. Wreaths of flowers and friezes covered with inscriptions in Telik characters intermingle with remarkable elegance; and the cupola is adorned with mirrors, cut facet-wine, and with strings and pendants of pearls. The tomb of Hussein is placed in the centre of this cupola. It is a square mass, of considerable height,—covered over with rich wrought in pearls mixed with diamonds, sapphires, and emeralds." Three balustrades protect this mausoleum. The first is of massive gold, wrought with great art. The two others are of massive silver, carved with the patience and skill of the Persian.

"The mosque of Imam Abbas, situate to the east, has no wealth of gold, silver, or precious stones; yet, in my opinion, it is, in an architectural point of view, far finer. Two minarets only flank its southern gate, and tower above its bold and magnificent cupola—built in porcelain, covered with wide arabesques of a very grand character, and with flowers of gold on a ground of tender green. When the hot sun of Araby darts its burning rays on this richly-coloured mass, the splendour and magnificence of the effect are such as thought can scarcely picture and no painting

can convey. The body of the edifice is not general,—adorned in enamel of a lapis-lazuli tint, and enriched by interminable inscriptions in white. All around are pierced, moulded windows, retiring within indented frames; and the great door, of the same style—flanked by two galleries, sustained by light and graceful columns—projects boldly out, in a manner closely resembling the porch of our ancient basilica. The court of this mosque is vast, square, and pierced at each angle with gates of great richness.

INSTITUTION OF CIVIL ENGINEERS.

THE session was opened on Tuesday, the 13th inst. Sir John Rennie, president, in the chair. Press of matter forced us to postpone our notice of the proceedings.

The paper read was a "Description of the machinery erected by Messrs. Maudslay and Field at the Minorin station, for working the London and Blackwall Railway," by A. J. Robertson, associate.

It commenced with a general account of the railway, quoted from Mr. Bidder's appendix to Mr. Stephenson's report on the atmospheric railway, as a parallel was then attempted to be drawn between the system of rope traction and that of propulsion by atmospheric pressure. The railway is about 3½ miles in length, built upon arches, and worked by two pairs of stationary engines of 400 horse power and 200 horse power respectively, at the Minorin and Blackwall termini. Wire ropes of 3½ inches in circumference, or 1½ inch diameter, formed of four strands, each composed of forty-two wires, extend along the length of the railway, guided by grooved pulleys, and coiled alternately at each extremity on drums, which are worked by the engines. The carriages are attached to the ropes by "grips," which can be detached at pleasure; and the carriages are arrested by breaks, so as to deliver their passengers at the numerous stations along the line, from whence about two-thirds of the amount of traffic is obtained. The carriages travel alternately along either line; and the signals for starting and the general working of the line are given by the electric telegraph. At first, some difficulty was experienced from the repeated fracture of the hemp rope, which was then used. Wire ropes, with swivels at given distances, were, however, adopted; and at present, in about two thousand journeys each way in each month, not above two fractures occur. Mr. Stephenson and Mr. Bidder, who, with other members, took part in the discussion, gave some curious particulars of the difficulty arising from the twisting of the rope, which was the cause of the destruction of the hemp rope, which had not any swivels in it. The cause of the torsion could not be satisfactorily accounted for; but it was conceived, that the circumstance of the rope being lapped under the drum at the Blackwall end, and over the drum at the Minorin end, might have some influence in the matter.

In the discussion, it was stated that the rope now used was formed of six strands laid round a hempen core, each strand composed of six wires also laid round a hempen core. That there was an evidence of very early corrosion whenever the wire came in contact with the hempen core. The power required to move the rope alone, was about 200 horse power with a hemp rope, and with the wire rope, on account of its greater weight, it required about 250 horse power. As to the question of expense; that point must not be considered abstractedly; it must be remembered that the traffic could not be carried on at the requisite speed by locomotives if they were required to stop seven times in 3½ miles; it was therefore a question whether the system of rope traction, by which the traffic could be conveyed at a given speed, or whether the intermediate traffic, should be abandoned. The latter, commercially speaking, could not be done, and the rope system was persevered in. The expense of working the engines and rope was stated to be about fourteen pence per train per mile.

The annual general meeting of this society was held on Tuesday evening, 20th inst., when the following officers and council were elected:—Sir John Rennie, president; W. Cubitt, J. Field, J. M. Rendel, and J. Stephenson, vice-presidents; J. K. Brunel, B. Cubitt, J.